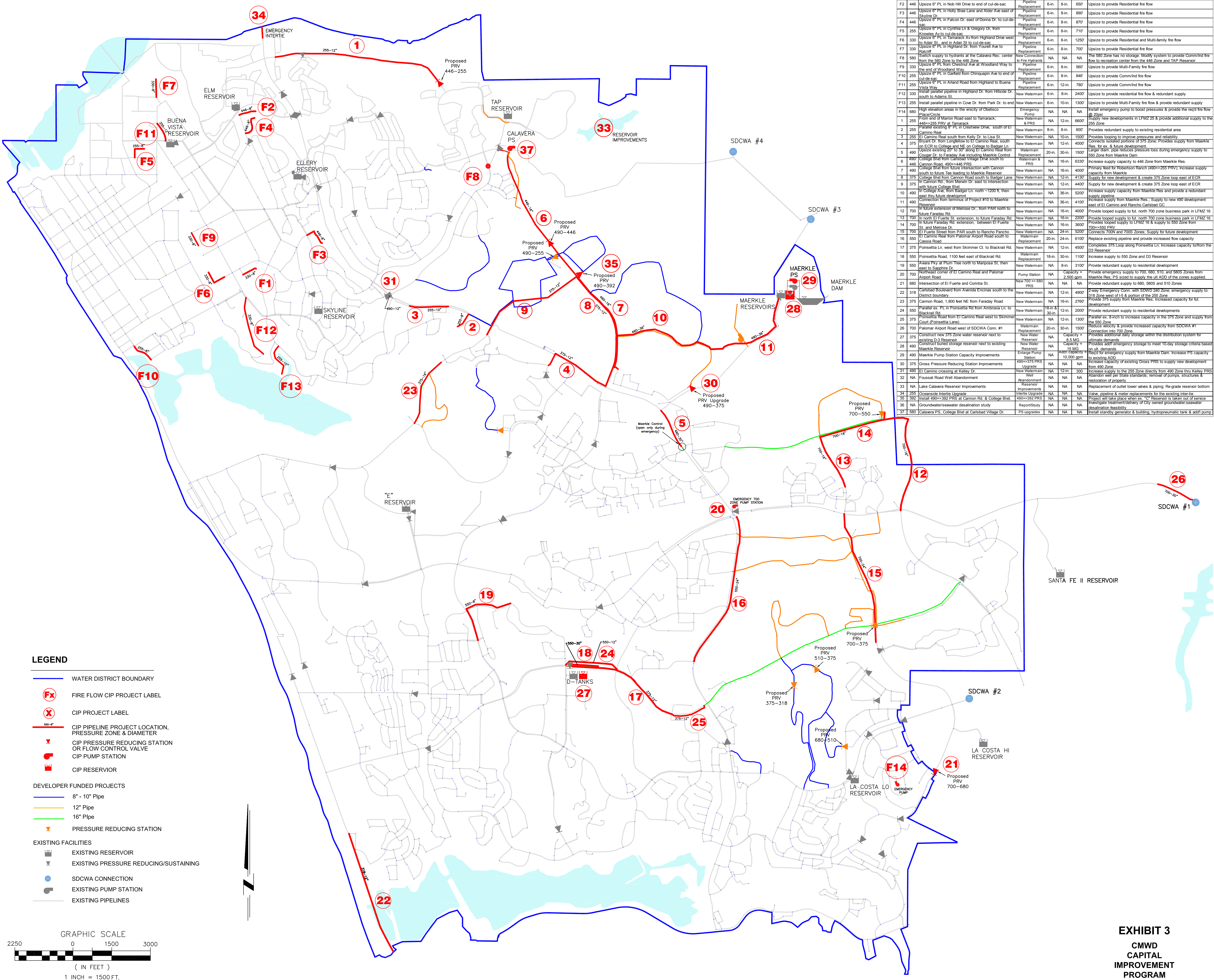


CARLSBAD MUNICIPAL WATER DISTRICT



Label	Zone	Description/Location	Project Type	Existing Dia.	New Dia.	Pipeline Length	Benefit/Comments
F1	330	Upgrade 6" and 4" PL in Jeanne Place to end of cul-de-sac.	Pipeline Replacement	6-in.	8-in.	600'	Upgrade to provide Residential fire flow
F2	446	Upgrade 6" PL in Nob Hill Drive to end of cul-de-sac.	Pipeline Replacement	6-in.	8-in.	650'	Upgrade to provide Residential fire flow
F3	446	Upgrade 6" PL in Holly Blue Lane and Alder Ave east of Skyline Dr.	Pipeline Replacement	6-in.	8-in.	890'	Upgrade to provide Residential fire flow
F4	446	Upgrade 6" PL in Falcon Dr. east of Donna Dr. to cul-de-sac.	Pipeline Replacement	6-in.	8-in.	870'	Upgrade to provide Residential fire flow
F5	255	Upgrade 6" PL in Cynthia Ln & Gregory Dr. from Knowles Ave to cul-de-sac.	Pipeline Replacement	6-in.	8-in.	710'	Upgrade to provide Residential fire flow
F6	330	Upgrade 6" PL in Tamara Dr. from Highland Drive west to Adler St. and in Adler St. to cul-de-sac.	Pipeline Replacement	6-in.	8-in.	1250'	Upgrade to provide Residential and Multi-family fire flow
F7	330	Upgrade 6" PL in Highland Dr. from Youell Ave to Ruffalo Dr.	Pipeline Replacement	6-in.	8-in.	700'	Upgrade to provide Residential fire flow
F8	580	Switch supply to hydrants at the Calavera Res. center from the 580 Zone to the 446 Zone.	New Connection to fire hydrants	NA	NA	NA	The 580 Zone has no storage. Mostly system to provide Combind fire flow to incocation center from the 446 Zone and Tap Reservoir.
F9	330	Upgrade 6" PL from Chastain Ave at Woodland Way to the end of Woodland Way.	Pipeline Replacement	6-in.	8-in.	560'	Upgrade to provide Multi-Family fire flow
F10	255	Upgrade 6" PL in Garfield from Chiquapi Ave to end of Hillside Dr.	Pipeline Replacement	6-in.	8-in.	846'	Upgrade to provide Combind fire flow
F11	255	Upgrade 6" PL in Arland Road from Highland to Buena Vista Way.	Pipeline Replacement	6-in.	12-in.	780'	Upgrade to provide Combind fire flow
F12	330	Install parallel pipeline in Highland Dr. from Hillside Dr. south to Adler St.	New Watermain	6-in.	8-in.	2400'	Upgrade to provide residential fire flow & redundant supply
F13	255	Install parallel pipeline in Cove Dr. from Park Dr. to end of Hillside Dr.	New Watermain	6-in.	10-in.	1300'	Upgrade to provide Multi-Family fire flow & provide redundant supply
F14	680	High elevation areas in the vicinity of Obelisco Plaza/City Center.	Emergency Pump	NA	NA	NA	Install emergency pump to boost pressures & provide the req'd fire flow @ 200psi.
1	255	Future extension of Marion Road east to Tamarack.	New Watermain & PRS	NA	12-in.	6900'	Supply new developments in LFMAZ 25 & provide additional supply to the 255 Zone
2	255	Future extension of PL in Chastain Drive, south of El Camino Real	New Watermain	8-in.	8-in.	600'	Provides redundant supply to existing residential area
3	255	El Camino Real south from Kelly Dr. to Lisa St.	New Watermain	NA	10-in.	1500'	Provides looping to improve pressures and reliability
4	375	Bryant Dr. from completion to El Camino Real, south of ECR to College and NE on College to Badger Ln.	New Watermain	NA	12-in.	4000'	Connects isolated portions of 375 Zone; Provides supply from Maerle Res. for ex. & future development
5	490	College Blvd from future intersection with Cannon Road to future intersection with Maerle Reservoir.	Watermain	NA	20-in.	1500'	Larger diam. pipe reduces pressure loss during emergency supply to 490 Zone from Maerle Dam
6	490	College Blvd from Carlsbad Village Blvd south to Cannon Road.	Watermain & PRS	NA	16-in.	6330'	Increase supply capacity to 446 Zone from Maerle Res.
7	490	College Blvd from future intersection with Cannon Road to future intersection with Maerle Reservoir.	New Watermain	NA	16-in.	4000'	Primary feed for Robertson Ranch (490=255 PRV). Increase supply capacity from Maerle.
8	375	College Blvd from Cannon Road south to Badger Lane.	New Watermain	NA	12-in.	4130'	Supply for new development & create 375 Zone loop east of ECR
9	375	In Cannon Rd. from Marwin Dr. east to intersection with future College Blvd.	New Watermain	NA	12-in.	4400'	Supply for new development & create 375 Zone loop east of ECR
10	490	In College Ave. from Badger Ln. north - 1200 ft. then east thru future development.	New Watermain	NA	36-in.	5200'	Increase supply capacity from Maerle Res. and provide a redundant supply pipeline
11	490	Connection from terminus of Project #10 to Maerle Reservoir.	New Watermain	NA	36-in.	4100'	Increase supply from Maerle Res.; supply to new 490 development east of El Camino and Rancho Carlsbad CC.
12	700	In future extension of Melrose Dr. from PAR north to future Faraday Rd.	New Watermain	NA	16-in.	4000'	Provide looped supply to fut. north 700 zone business park in LFMAZ 16
13	700	In north El Fuerte St. extension, to future Faraday Rd.	New Watermain	NA	18-in.	2200'	Provide looped supply to fut. north 700 zone business park in LFMAZ 16
14	700	In future Faraday Rd. extension, between El Fuerte St. and Melrose Dr.	New Watermain	NA	16-in.	3600'	Provide looped supply to LFMAZ 16 & supply to 550 Zone from 700=550 PRV
15	700	El Fuerte Street from PAR south to Rancho Pajaro.	New Watermain	NA	24-in.	5200'	Connects 700N and 700S Zones. Supply for future development
16	550	El Camino Real from Palomar Airport Road south to Casella Road.	Watermain Replacement	20-in.	24-in.	6100'	Replace existing pipeline and provide increased flow capacity
17	375	Poinsettia Ln. west from Skinner Ct. to Blackhall Rd.	New Watermain	NA	12-in.	4500'	Completes 375 Loop along Poinsettia Ln. Increase capacity to/from the D3 Reservoir.
18	550	Poinsettia Road, 1100 feet east of Blackhall Rd.	Watermain Replacement	18-in.	30-in.	1100'	Increase supply to 550 Zone and D3 Reservoir
19	550	Avard Rd. at Plum Tree north to Mariposa St. then east to Sapphine Dr.	New Watermain	NA	8-in.	3100'	Provide redundant supply to residential development
20	700	Northwest corner of El Camino Real and Palomar Airport Road.	Pump Station	NA	Capacity = 2,500 gpm	NA	Provide emergency supply to 700, 680, 510, and 580S Zones from Maerle Res. PS sized to supply the full ADD of the zones supplied
21	680	Intersection of El Fuerte and Cornelia St.	New 700=680 PRS	NA	NA	NA	Provide redundant supply to 680, 580S and 510 Zones
22	318	Carlsbad Boulevard from Avenida Encinas south to the District boundary.	New Watermain	NA	12-in.	4900'	4-way Emergency Conn. with SDCWD 240 Zone; emergency supply to 318 Zone west of 16 & portion of the 365 Zone
23	375	Cannon Road, 1,800 feet NE from Faraday Road	New Watermain	NA	16-in.	2760'	Provide 375 supply from Maerle Res. Increased capacity for fut. development
24	550	Parallel ex. PL in Poinsettia Rd from Ambrosia Ln to Blackhall Rd.	New Watermain	18-in & 30-in.	12-in.	2000'	Provide redundant supply to residential developments
25	375	Poinsettia Road from El Camino Real west to Skinner Court (Poinsettia Lane)	New Watermain	NA	12-in.	1300'	Parallel ex. 8-inch to increase capacity in the 375 Zone and supply from the 550 Zone
26	700	Palomar Airport Road west of SDCWA Conn. #1	Watermain Replacement	20-in.	30-in.	1500'	Reduce velocity & provide increased capacity from SDCWA #1
27	375	Construct new 375 Zone water reservoir next to existing D-3 Reservoir.	New Water Reservoir	NA	Capacity = 8.5 MG	NA	Provides additional daily storage within the distribution system for ultimate demands
28	490	Maerle Pump Station Capacity Improvements	New Water Reservoir	NA	Capacity = 15,000 gpm	NA	Provides 3000 emergency storage to meet 10-day storage criteria based on ultimate demands
29	490	Maerle Pump Station Capacity Improvements	Enlarge Pump Station	NA	Capacity = 10,000 gpm	NA	Provide 3000 emergency supply from Maerle Dam. Increase PS capacity to existing ADD
30	375	Gross Pressure Reducing Station Improvements	490=375 PRS Upgrade	NA	NA	NA	Increase capacity of existing Gross PRS to supply new development from 490 Zone
31	390	El Camino crossing at Kelley Dr.	New Watermain	NA	12-in.	300'	Increase supply to the 255 Zone directly from 490 Zone thru Kelley PRS
32	NA	Foussat Road Well Abandonment	Well Abandonment	NA	NA	NA	Abandon well per State standards, removal of pumps, structures & implosion of property
33	NA	Lake Calavera Reservoir Improvements	Reservoir Improvements	NA	NA	NA	Replacement of outlet tower valves & piping. Re-grade reservoir bottom
34	255	Oceanside Inlet Upgrade	Inlet Upgrade	NA	NA	NA	Valve, pipeline & meter replacements for the existing inlet-tie
35	392	Install 480=392 PRS at Cannon Rd. & College Blvd.	480=392 PRS	NA	NA	NA	Project will take place when ex. 700 increases in taken out of service
36	NA	Groundwater/sewewater desalination study	Report/Study	NA	NA	NA	Investigate feasibility/delivery of city owned groundwater/sewewater desalination feasibility
37	580	Calavera PS, College Blvd at Carlsbad Village Dr.	PS upgrades	NA	NA	NA	Install standby generator & building, hydro-pneumatic tank & addl pump

EXHIBIT 3
CMWD
CAPITAL
IMPROVEMENT
PROGRAM